

IN THE CLAIMS

Claim 1 (currently amended). Process for the separation from a non-aqueous solvent of a substance which is present in said non-aqueous solvent in dissolved form, colloidal form, or in both of such forms, which comprises passing said non-aqueous solvent through a membrane having:

a hydrophobic coating formed by reaction of the membrane surface with a silane of the formula R<sub>1</sub>R<sub>2</sub>R<sub>3</sub>R<sub>4</sub>Si wherein at least one but at most three of the groups R<sub>1</sub> to R<sub>4</sub> are a hydrolyzable group selected from the group consisting of -Cl, -OCH<sub>3</sub> and -O-CH<sub>2</sub>-CH<sub>3</sub>, or at least one but at most three of the groups R<sub>1</sub> to R<sub>4</sub> are a nonhydrolyzable group selected from the group consisting of alkyl groups and phenyl groups, or at least one of the groups R<sub>1</sub> to R<sub>4</sub> is a hydrolyzable group selected from the group consisting of -Cl, -OCH<sub>3</sub> and -O-CH<sub>2</sub>-CH<sub>3</sub> and at least one of the groups R<sub>1</sub> to R<sub>4</sub> is a nonhydrolyzable group selected from the group consisting of alkyl groups and phenyl groups, and

a mean pore diameter of not more than 30 nm.

Claim 2 (original). Process according to Claim 1, wherein said substance is a catalyst

Claim 3 (original). Process according to Claim 1, wherein said membrane is a porous membrane.

Claim 4 (original). Process according to Claim 3, wherein said porous membrane is an inorganic membrane.

Claim 5 (original). Process according to claim 4, wherein said inorganic membrane is a ceramic membrane.

Claim 6 (original). Process according to claim 5, wherein said ceramic membrane is formed of Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub>, ZrO<sub>2</sub>, SiO<sub>2</sub> or a mixture of two or more of said oxides

Claim 7 (original). Process according to Claim 1 or 3, wherein the mean pore diameter of the membrane is not more than 20 nm.

Claim 8 (original). Process according to Claim 7, wherein said mean pore diameter is from 2 nm to 10 nm

Claim 9 (**cancelled**).

Claim 10 (original). Process according to Claim 1 or 3, wherein said nonaqueous solvent is selected from the group consisting of alcohols, ethers, aromatic hydrocarbons, and optionally halogenated aliphatic hydrocarbons.

Claim 11 (original) Process according to Claim 10, wherein said alcohols are methanol or ethanol, said ethers are tetrahydrofuran, said aromatic hydrocarbons are chlorobenzene or toluene and said optionally halogenated aliphatic hydrocarbons are dichloromethane.

Claim 12 (original). Process according to Claim 2, wherein said catalyst is selected from the group consisting of the organometallic complex compounds, ligands of organometallic complex compounds and complex compounds of elements of group IVA, VA, VIA, VIIA, VIIIA or IB of the Periodic Table of the Elements.

Claim 13 (original). Process according to Claim 12, wherein said catalysts are selected from the group consisting of complex compounds of manganese, iron, cobalt, nickel, palladium, platinum, ruthenium, rhodium or iridium.

Claim 14 (original). Process according to Claim 13, wherein said complex compounds are selected from the group consisting of Ru-BINAP, Pd-BINAP, Rh-EtDUPHOS and complex compounds of triphenylphosphine with palladium or rhodium.

Claim 15 (original). Process according to Claim 1 or 3, wherein said separation is carried out at a temperature of -20°C to 200°C.

Claim 16 (original). Process according to Claim 15, wherein said temperature is 0°C to 150°C

Claim 17 (original). Process according to Claim 1 or 3, wherein said process is conducted at a transmembrane pressure of from 2 000 to 40 000 hPa.